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Cycles are only *one* of the forces you must consider if you are attempting economic forecasting.

If you ignore the cycles you run the risk of serious errors.

But unless you study and weigh all the *other* forces that, in addition to cycles, combine to create economic change, you will make grave mistakes.

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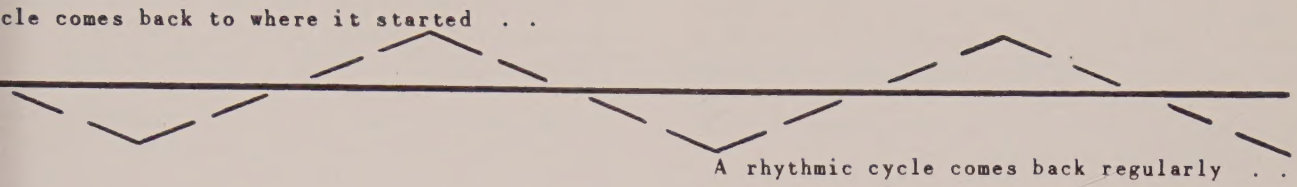

cle comes back to where it started . .
A rhythmic cycle comes back regularly . .

HE DIRECTOR'S LETTER

ear Member:

I don't find myself too disturbed by the esent minor business set back. I find myself accord with some comments made on December 7 one of the nation's leading authorities on siness indicators, Dr. Geoffrey H. Moore of e National bureau of Economic Research, in stimony before the Joint Economic Committee Congress:

"First, I think a peak in business activity s reached in or around May 1960, and that a ntraction has been under way since then. cond, there have been a few preliminary velopments of the sort that usually precede upturn but they are not yet decisive enough suggest that the upturn is in sight. Third, ere are some tentative indications that this ntraction will be relatively mild."

We have become so used to forced-draft pros- rity that we think of the slightest little tback as a depression. We must learn that a rtain amount of variation is inevitable.

Most of the present generation has never perienced a real depression. I am an old ough bird to have seen a good one (1932). I member one night in that year when I was route from Toledo to Washington. I was the *ly* passenger on the sleeping car. I have ten wondered how the porter managed to live the 25¢ or so that I gave him by way of a p; the 25¢ (or nothing) he got the day after.

I never heard the word depression applied business setbacks until 1930 or so. In college the word had always been *panic*. The panic of 1893; the panic of 1907. Then one day, reading some old newspapers of 1878, I found that the word *depression* was used to describe the setback that followed the panic of 1873.

Depression is an apt word. People certainly were depressed. I assumed at the time that people were depressed because of the setback. Since I have known about cycles I have wondered if we did not have a setback in business *because* we were depressed. That is, I have wondered if some of these mysterious cyclic forces were not responsible for people's *feelings* with resultant business stagnations, rather than the other way around.

It's too bad that the mass of people are so misled regarding the basic facts of economic life. They call to mind certain savages in Polonesia who haven't yet learned the cause and effect relationships involved in the coming of babies. We know all about babies, but we don't yet know much about depressions. For instance, the other day a steel worker friend of mine was lamenting his layoff:

"What in Heaven's name did you expect when you won your strike and priced yourself out of the market?" I asked him. He looked blank.

I was reminded of a night some years ago when I was walking south on Lexington Avenue in New York City, just below 42nd Street. A taxi was cruising north, close to the curb. Another taxi, at reasonably high speed, was also coming north, but in the center of the street. The curb taxi, without warning and ignoring the second one, decided to make a U-turn. There was great screeching of tires. I headed for the protection of the nearest masonry. How they ever managed to avoid a major accident I'll never know. After it was all over I heard the first taxi driver, who had caused all the trouble say, "Now what do you suppose he did that for?"

He understood as little of cause and effect as my steel worker friend.

Everything we do seems designed to introduce regidities that make needed readjustments more difficult. Minimum wage laws for example. Unemployment compensation. The emphasis on high *hourly* wages. And particularly union demands for even higher wages without correspondingly increased productivity.

If anyone thinks that the good old laws of supply and demand are not still working they should have been in downtown Pittsburgh one morning some months past. It seems that a certain store had advertised some *real* bargains. I don't remember details, but let's say Westinghouse electric irons for $5 and the like.

Of course these were loss-leaders, and there weren't very many of them but you should have seen the street in front of the store! There were 3,000 people there! Police reserves had to be called out. Even so, the windows of the store were broken down in the near riot, and, as I remember it, the store had to be closed.

True, we have 4,500,000 or so unemployed, *but how many of them are willing to work for what they are worth?* Some don't even want to work!

Along these lines the following story may amuse you:

Some years ago I had a tenant who was sick and out of work and of course months and months back with the rent. He had a son of 25 or so also out of work. The family situation was desperate.

I decided to give the young man a job. When my manager went to pick the young man up (no one would walk a mile to work anymore), he passed under the kitchen window and heard the young man's mother say, "I can't give you any lunch. There is nothing in the house to eat except a little potato soup, and we have nothing in which you could carry it."

Well, somehow we got him lunch and paid him in cash at the end of the day so that he could buy food for his evening meal, and have lunch for tomorrow.

This routine went on for *three* days. At the end of the third day the young man said, "I won't be out tomorrow."

"What's the trouble?" I asked.

"I have some important business to attend to," he said.

"What is it?" I pressed.

"I've got to build a dog house."

"It's nice warm weather." I said, "Don't you suppose the dog could wait until Saturday?"

"Well, I suppose he could," he said. So he came out to work!

Next week he had more "urgent" business. The second time he wanted the day off because his television set wouldn't work. He thought there was a break in the wire leading to the aerial on the top of the hill! I realize that something like this couldn't wait, but I prevailed upon him to look for the break after work during the long light summer evening.

It takes all kinds!

Speaking of unemployment, I am reminded of my visit last summer to Bern, the capital of Switzerland.

"How many unemployed do you have here?" I asked my host.

"Oh, perhaps five," he answered.

"Five thousand?" I said, knowing that Bern had a population of about 160,000.

"No, *five*," he said. "We don't have unemployment in Switzerland. We work."

Maybe we here will learn someday, too.

Cordially yours,

Edward R. Dewey

Director

A REVIEW OF THE GEISINGER INDICATOR

by E. R. Dewey

I wonder if you realize how very good the eisinger Indicator really is?

I also wonder if you know how to use it to ullest advantage?

First of all, the Geisinger Indicator was nvented by Robert Geisinger of Troy, Ohio. It oes up and down *ahead of* the curve of Industrial Production.

The Geisinger Indicator, however, goes up nd down around a *horizontal* straight line. ndustrial Production goes up and down around *sloping* line called the trend. The slope of his trend changes from time to time without otice. You have to grope your way along it.

Below (Fig.1) is a chart of Industrial Production from 1947 through 1960. I have added channel lines about 20 points apart to enclose most of the highs and lows. I have also added, between the channel lines a sloping *trend.* This trend is pretty stable, but it does change direction. For instance it changed its slope at June 1953, but there was no way of knowing this at the time. You had to wait until the end of 1955, when the crest that came at that time failed to reach the upper channel line, before you had notice.

The Geisinger Indicator shows you *in advance* whether Industrial Production will be above or below *trend,* but it does not tell you what the trend will do. This you have to figure out for yourself.

In general, you can assume that the *trend*

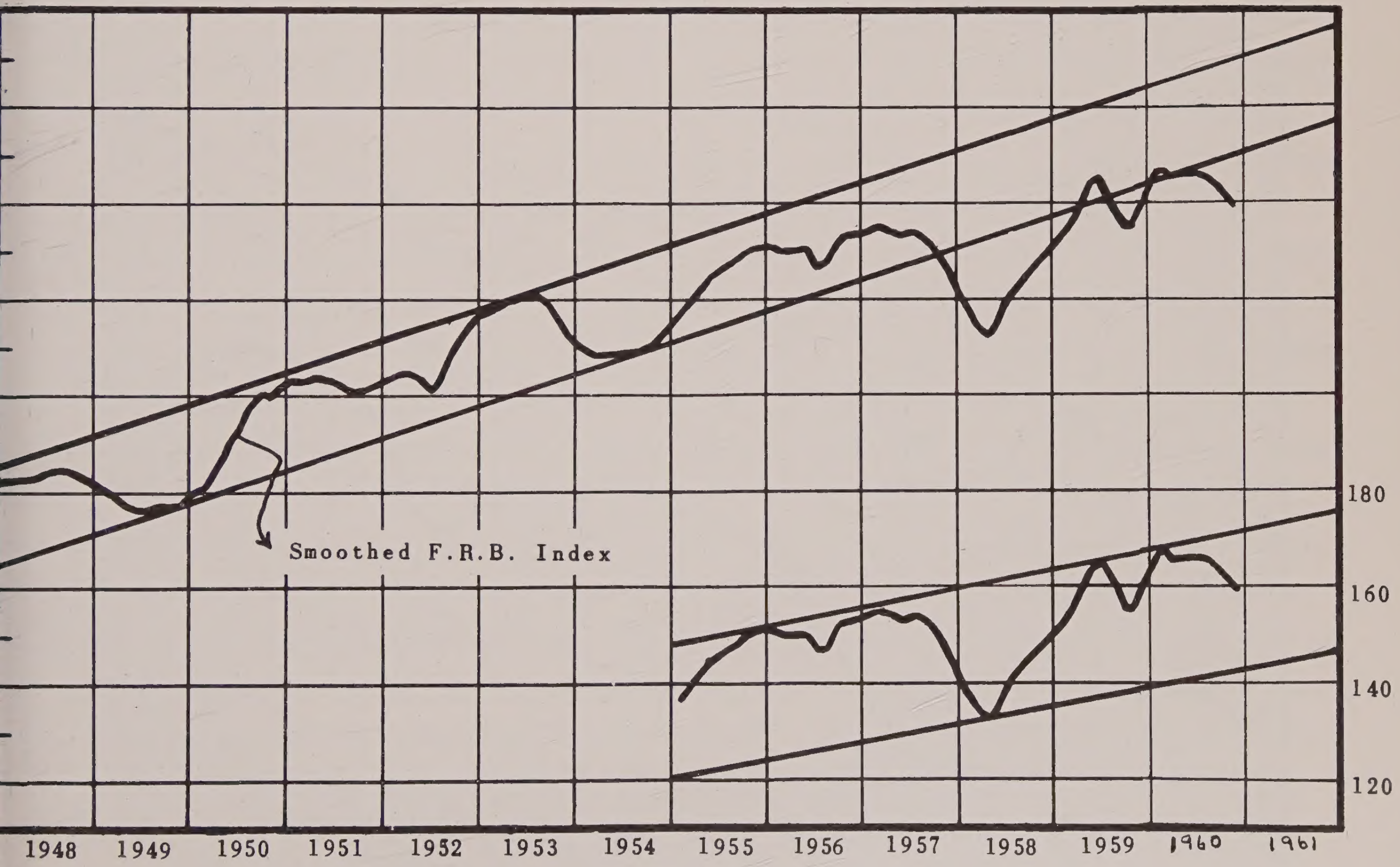
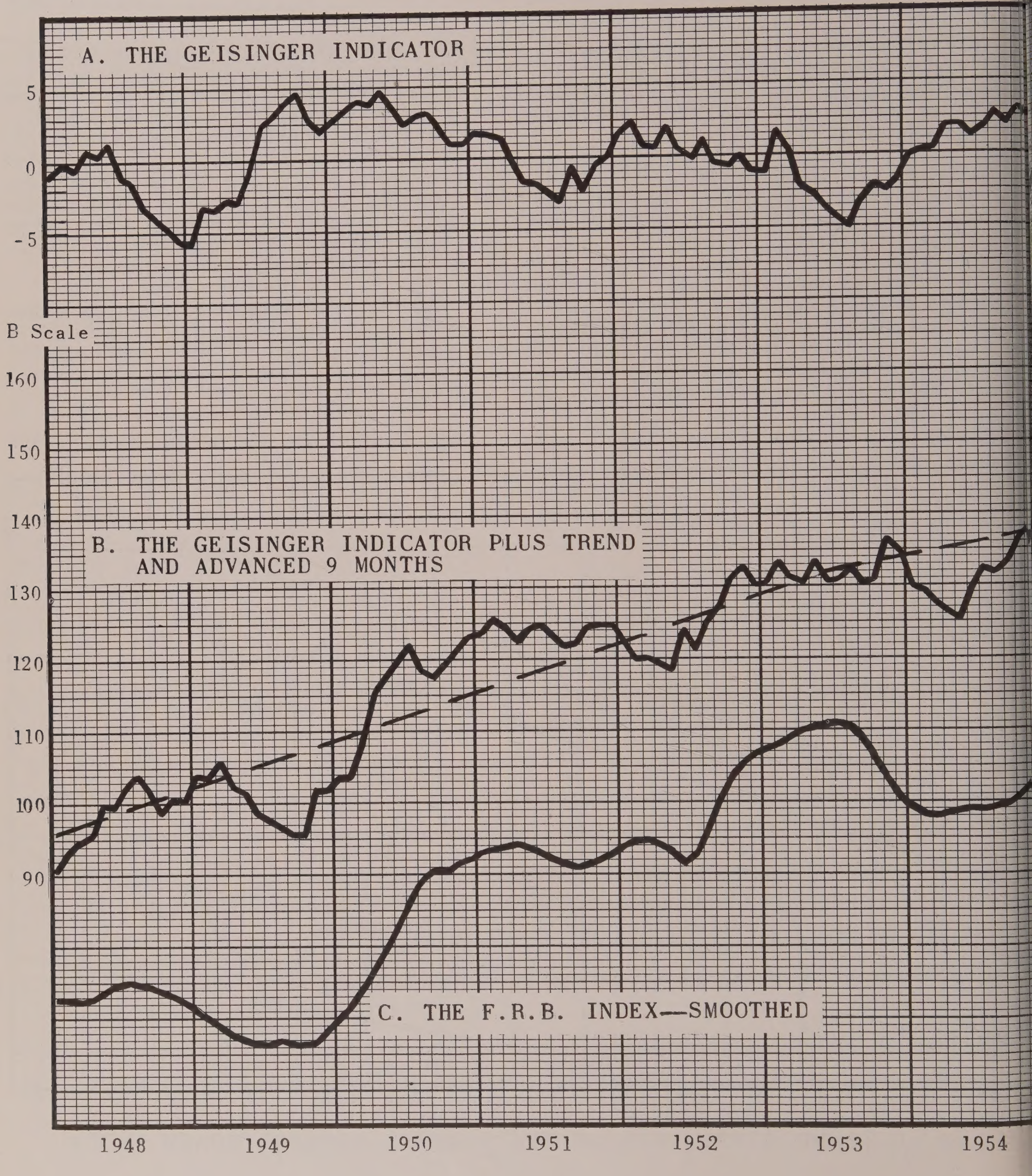


Fig. 1: TREND SINCE 1947 OF THE FEDERAL RESERVE BOARD INDEX

is continuing as it has been until the curve breaks out of the channel. But breaking out of the channel does not always mean a new trend. Witness 1958.

The Geisinger Indicator that is computed on January 25th, when advanced, applies to June 1961, 5 months away. It would be nice if it told you 12 months in advance, or 24 months, or 36 months, but it doesn't. Be thankful for what it does do.

In passing, I might call your attention to the fact that the F.R.B. Index is always a month *late* in coming out. The Geisinger Indicator Value thus projects *6* months ahead of the F.R.B. value. The Geisinger Indicator does not tell you the ***extent*** of the coming advance



decline, except in a general way. By the
ture of its construction it can never go
ove plus 6, no matter how good things are
ing to be. It can never go below minus 6 no
tter how bad things are going to be. It does
wever tell you the *direction* in which 8n-
strial Production is going to go.

In Fig. 2 you will see (top curve) the Geisinger Indicator from Jan. 1948 to date. In the 2nd curve of Fig. 2 I have advanced the Geisinger Indicator values 9 months, multiplied them by 2, and added them to the trend of Industrial Production as derived in Fig. 1. This is your forecast line. It is the sort of thing I have expected you to do for yourself, mentally, from the figures given you each month.

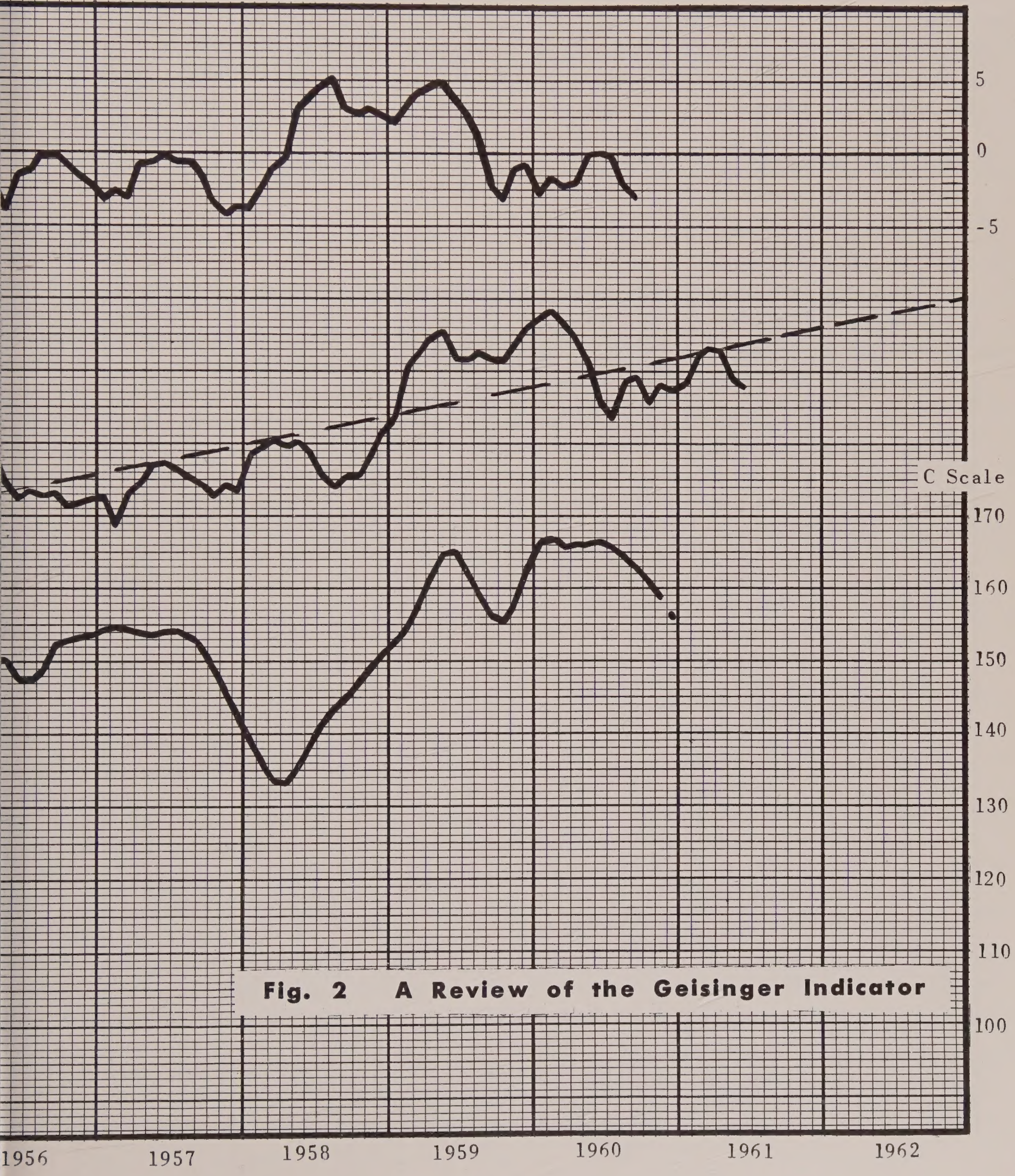


Fig. 2 A Review of the Geisinger Indicator

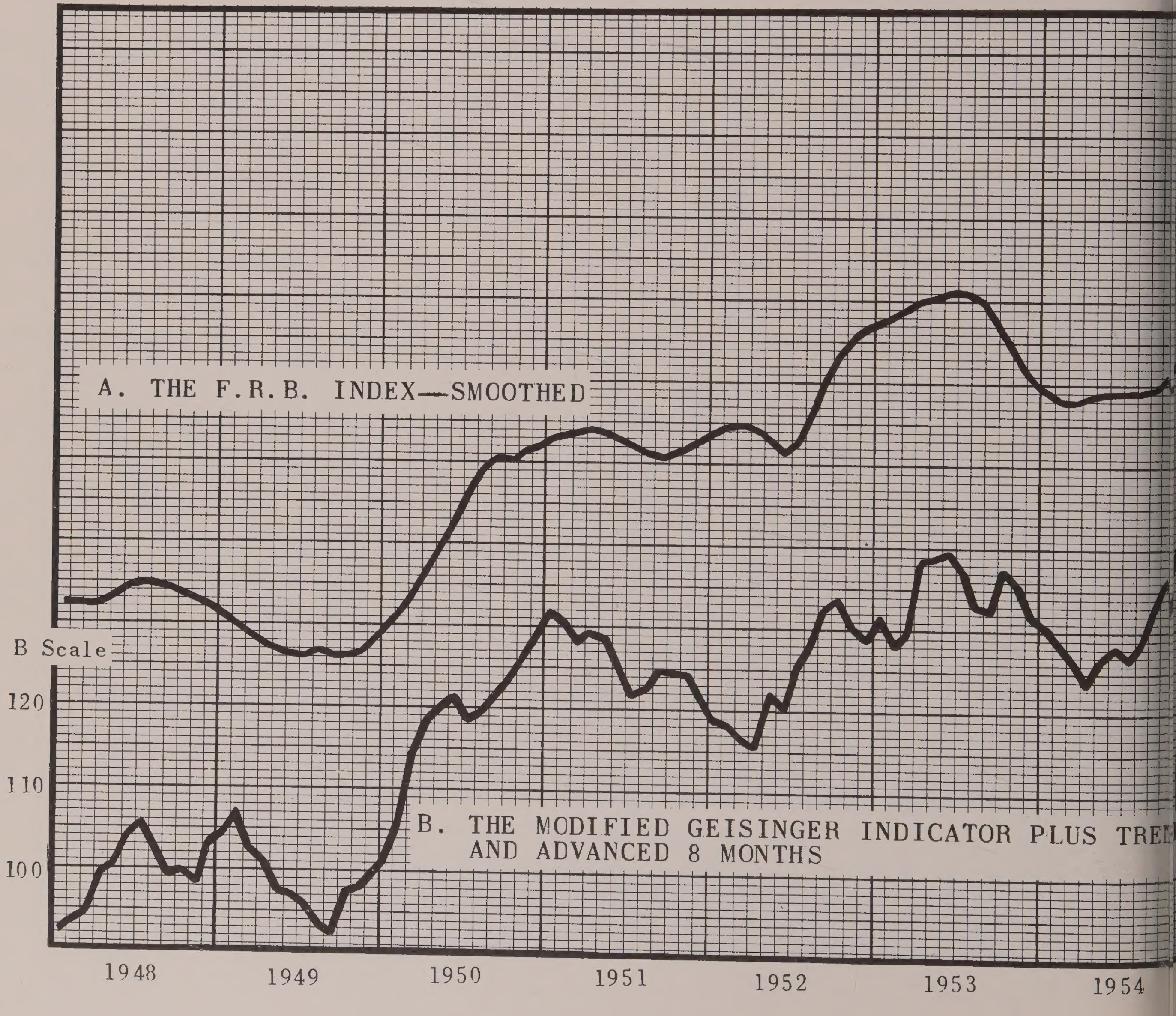
The 3rd curve of Fig. 2 shows the actual F.R.B. Seasonally Adjusted Index of Industrial Production values (smoothed) for comparison.

Now when it comes to interpreting the forecast line you have two approaches. First of all you have the height and the slope of the forecast curve itself, which is always available 5 months ahead of time (6 months ahead of the F.R.B. curve). Second, you have confirmation "signals" when the Geisinger Indicator cuts plus 2 going up or minus 2 going down.

We publish two other Indicators for you. (1) The First Difference Indicator, which merely measures the *slope* of the F.R.B. Index. The slope of an advance or decline usually slacks off several months before the actual top or bottom, as you can see by inspection of the F.R.B. curve itself. The numerical values of the First Difference Indicator merely point up this fact. (2) We also publish the *Modified* Geisinger Indicator, which is merely the sum of the Geisinger Indicator and the First Difference Indicator. The *Modified* Geisinger Indicator (times 2) advanced 8 months and added to the trend of F.R.B. Production is shown below on Fig. 3. The Modified Geisinger Indicator really isn't as good as the Geisinger Indicator, but superficially it *looks* better.

The Geisinger Indicator is not a perfectly smooth curve. It wiggles a little. Sometimes it makes false starts. That is why you use the signals to confirm the forecast of the curve. Ths signals say, "Now you can be sure." (Of course sometimes the signals might lie, but so far they never have.)

I often get complaints that the forecast written, let us say, on January 25th does not reach our members until a month later. This



elay is caused by (1) the week we need to inrporate *other* figures which become available 1 the same day into the Round-Up section of ie report, (2) the week and a half the printer eeds to get the book out, (3) the half week ir mailers need to affix labels, and (4) the vo weeks it takes our dear Uncle to transport ie finished product through the mails.

Those who wish to avoid this delay can do by paying an extra $3 a year for a special irst class mail service (air mail to the est Coast) that gets the text of the Geisinger ndicator off to them two or three days after t is written.

he Record

This might be a good time to look at the ecord.

The month-by-month record of what I said in each of my Geisinger Indicator letters from the beginning of these letters (October, 1954) was printed in *Cycles* for October, 1958. There is no need to repeat it here. It is enough to say that it was almost 100%, and well ahead.

On May 29, 1958 I said, *"The upward turn has definitely come in both of these Indicators."*

Bringing the record up to date, in capsule form, we have:

August 28, 1958: *". . . the Indicator continues to confirm a halt in the recession."*

September 24, 1958: *"We have the green light."*

October 30, 1958: *"The green light is still shining brightly."*

November 30, 1958: *". . . there is not yet any reason to look for a turning. . ."*

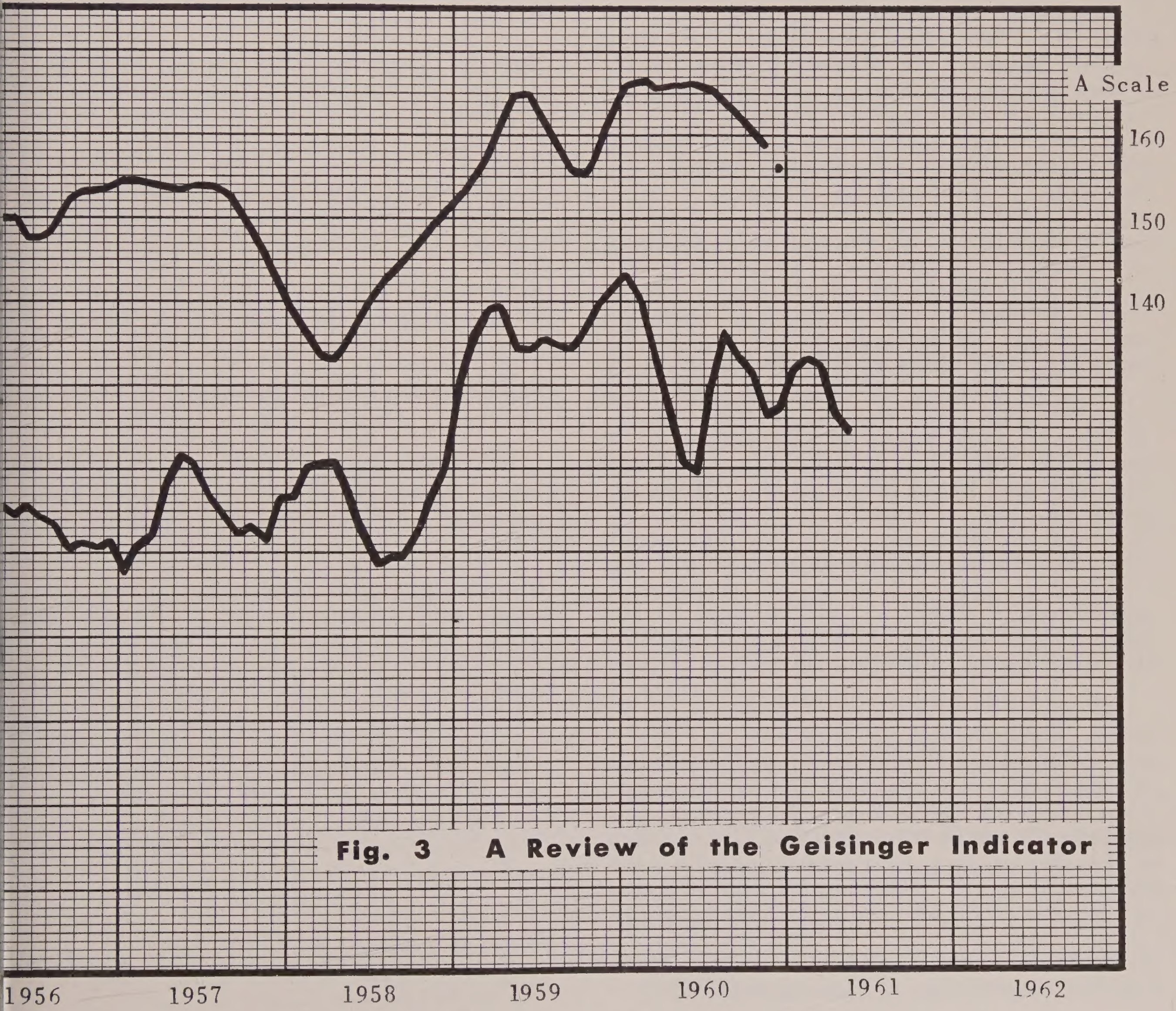


Fig. 3 A Review of the Geisinger Indicator

December 24, 1958: *". . .the first signs of hesitation are appearing. . ."*

"Business is good. It will doubtless get better. But way off on the horizon there is a little cloud that needs to be watched!"

Here you had five months warning of the peak that came in April, 1959.

January 28, 1959: *". . .the little cloud on the horizon which I mentioned last month has grown much larger. . ."*

Note that as early as this month the Indicators were dropping, thus fore-shadowing the dip in the third quarter.

February 26, 1959: *"The fact that the Indicators have turned introduces a note of caution."*

The peak came in June.

March 25, 1959: *"The note of caution. . . remains. However, the literal interpretation is that, in the immediate future, the Index of Production will continue high."*

April 22, 1959: *". . .we can expect some leveling of the Production Index."*

May 27, 1959: *". . .production will continue at a high level (unless there is a steel strike, of course). . ."*

June 24, 1959: *"Production will, of course, decline if there is a steel strike. . ."*

July 29, 1959: *". . .steel strike. . ."*

August 26, 1959: *". . .the Indicator recovery should be good if thr strike does not last too long."*

As you know, the recovery was good.

September 21, 1959: *". . .if the steel strike does not last too much longer, the economy should rebound quickly."*

It did.

October 28, 1959: *". . .the outlook continues good for the near future."*

November 25, 1959: *"All the Indicators, when plotted, now show a downturn instead of a sideways movement. This fact introduces a note of caution."*

Here you had seven months notice of the downturn that became visible in July 1960.

December 23, 1959: *"In view of the distortions in the Indicator caused by the strike, the decline of the Indicator may be a false alarm. But it is not necessarily a false alarm. Let us, therefore, continue to consider it as a note of caution—like a storm on the horizon that may blow around, but which may not, and therefore which needs to be watched."*

January 27, 1960: *". . .the appearance of +2 introduces a definite note of warning."*

February 24, 1960: *". . .caution is now advisable. . ."*

March 23, 1960: *". . .the recent note of caution stands. . ."*

April 27, 1960: *"Caution continues to be the watchword."*

May 25, 1960: *"Don't ignore the current danger signal. . ."*

June 29, 1960: *"Although the May Index of Production was the highest single month on record our warning note of last month still stands."*

July 27, 1960: *". . .the current warning should not be ignored. Caution should be used in business transactions until the Geisinger again cuts -2.00 going up."*

August 24, 1960: *". . .very little developed during the month to brighten the economic outlook for the end of the year."*

September 28, 1960: *"Our recent note of warning still stands. . ."*

By this time the F.R.B. Index had declined from 167 in May to 165 in August and the public was beginning to note that all was not well.

October 26, 1960: *"Our recent warnings will stand until the Geisinger Indicator reaches plus 2.00. In the meantime we have seen the fulfilkment, or the beginning of the fulfillment, of last January's danger signal."*

November 23, 1960: *"I cannot predict any great improvement in the course of business until we get that plus 2.00 good times signal."*

December 28, 1960: *"Three danger signals in a row cannot be ignored."*

* * *

How in Heaven's name could you ask for anything any better?

r Patrick—one of the industrial giants of Great itain—has been a member of our Committee since 1940. became a member because of the importance to the dson's Bay Company of Cycles of animal abundance and cause of his friendship for Mr. Copley Amory, our rst Chairman. When I saw him last summer he was retired t had all of his old force and vigor. *E. R. D.*

IR PATRICK ASHLEY COOPER*

By Ian Fraser

Sir Patrick Ashley Cooper, the fine-looking x-foot four son of an Aberdeen advocate, es his remarkable success in the City of ndon to a pair of spectacles.

But for spectacles Sir Patrick would never ve become Governor of the mighty Hudson's y Company of Canada; chairman of, or on the ard of sixty companies; the first Aberdonian be made a director of the Bank of England; st war Member of the Supply Council and rector-General of Finance and Contracts.

Spectacles directed into the world of com- rce a man with a wizard's flair for rescuing mpanies from the jaws of bankruptcy.

At nineteen years of age Cooper was all set r the regular Army as an artillery officer. en, to quote himself, "to my great distress, was told my eyes were giving out and I would ve to wear spectacles for the rest of my fe."

That put paid to any hope of a career as a nner. In those pre-1914 days no one with asses stood a ghost of a chance of getting to the Army.

Today the varsity student who wished to be artillery officer is High Sheriff, for the cond time, of the County of London, knighted r his war work, Lord of the Manor of Hexton, lovely old English estate on a spur of the ilterns, where, with his Welsh-born wife om he first met at Aviemore, he lives hap- ly in semi-retirement, helping, as he says, make the Welfare State work. He is also Freeman of the City of London and one of r Majesty's Lieutenants for the City, and has been High Sheriff of Hertfordshire.

As it happened he was to get all the artillery practice he wanted and be badly knocked about in the process, for the 1914-18 War was just around the corner. He was twice mentioned in Despatches and received the immediate reward of a Brevet Majority.

It was while he was at Cambridge University continuing an education begun at Aberdeen Grammar School and Fettes that he was told about his eyesight. He had recruited and trained a battery of Artillery for the Cambridge Officers Training Corps. The first and only undergraduate ever to command the Unit.

There was nothing for it but to return to Aberdeen and follow the footsteps of his father—the late Mr. Patrick Cooper—into law. He started as an apprentice at Paull & Williamson, the advocates in Union Street.

At Cambridge he had collected an M.A. degree and a first rate training in athletics, rowing Head of the River and becoming England's reserve oar in the Olympic rowing eight of that year. He is now an Honorary Fellow of Trinity Hall. He duly got his LL.B at Aberdeen University.

Gazing out of his study window at the lovely rolling park-lands, Sir Patrick told me of his dislike for law.

"I felt I would sooner break stones than go on with law," he said intensely. "I felt Aberdeen was not for me and decided to go to London. My father and mother didn't object, but my aunts and uncles (they had the shipping form of John Cook and Sons) did. They told me I was crazy to throw up the chance of becoming a partner in my father's firm."

Between them they must have turned on the heat pretty fiercely, for Sir Patrick, with a

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HIS STORY WAS CARRIED IN JANUARY 1958 BY E *Free Press and Journal* OF ABERDEEN, SCOT- ND. IT IS REPRINTED WITH PERMISSION.

reminiscent grin of achievement, remarked, "I take credit to myself for having resisted them."

He went off to London, but before long a very angry young man was back in Aberdeen fuming to his father "that these people in London have moss on their backs. They don't know a good man when they see one."

Immodestly put perhaps, but he was right in the event. In his anxiety to get into the bigger world he did a Quixotic thing. He drew all his money our of the bank—a 250 legacy left him by an aunt—and crossed the Atlantic not, as you would suppose, to find work but, in the first instance, to see the United States and Canada and meet the people.

Sir Patrick's people—they lived at Rublislaw—must have been of the stuff boys dream of but rarely get. "My father and mother," he said, "made me the tremendous gift of allowing me as a boy to strike out for myself. At the age of ten I was cycling all over Scotland. Although I am certain she never slept a wink all the time I was away, my mother let me go on a whaling expedition with a crew entirely of Norwegians as far as Iceland."

Young Cooper became a cowboy in Arizona and a lumberjack in British Columbia, but these were only brief interludes during the five months he spent touring Canada and the United States.

"That will show how far money went in those days," he observed.

He always stayed at the best hotels to get a good address but, with a chuckle he confessed, "I asked the receptionist to give me the cheapest room and I always ate at the cheapest eating place outside. That is where I met *the people.*"

But he knew what he was doing. In St. Louis, Missouri—of all places—he was offered a job with a company in London—of all places.

Thus he was to return to the City that once spurned him. He joined Lord St. David's Group of Trust Companies. There he worked under Aberdonian, Sir Alexander Roger. It was while he was looking into the affairs of the companies in which his Group had money invested that he began to be known as the Aberdonian with the all-seeing eye and the organising genius for breathing life once more into companies that were moribund.

That great Financial Statesman and romantic of the time, Montagu Norman, the bearded Governor of the Bank of England, shrewdly estimated Cooper's capabilities and set him to work, first to clean up the disaster of the Government sponsored British Italian Bank and then to save the Hudson's Bay Company which, at that time, was heading for bankruptcy.

All through his working life Sir Patrick has held to the theory that if a business is going down its Management is at fault. He also believes in seeing things for himself.

In no time he had pulled the Hudson's Bay Company round. He was the first Governor ever to penetrate to its lonely outposts in the Arctic circle. which he entered six times. When he retired as Governor twenty-one years later Hudson's Bay Company was flourishing.

Sir Patrick was seventy only a few days ago. He is as erect today in figure as he was at the start of his career, he talks as he thinks—clearly and concisely. Of his own great work in the commercial world he says simply "My job has been to fit square pegs into square holes. It is the right man in the right place that matters." That is a masterpiece of understatement. A better clue to the man is found in the motto of his Coat of Arms: "I will find a path or make one."

What are the chances for the young man or girl from the North nowadays? "I have spent my life looking for the right men," replied Sir Patrick, "and I can assure you there never have been enough good men to go round. There is room at the top for every Scot with ability." But he added this advice to young people: "Never hesitate to plunge in where there is trouble—because where there is trouble there is no competition."

If the wind is right Sir Patrick can sometimes hear the Aberdonian express thundering northwards through Hitchin. But he has no desire to join it. With the Welsh girl he met at Aviemore and married forty years ago he is happy to stay on his 4,000 acre estate in the Chilterns, with occasional visits to the scene of former board-room triumphs in London.

His only son (they also have two daughters and eight grandchildren) runs the 1,000 acre farm which, with some of the finest pheasant coverts in the South of England also forms part of the estate.

About those spectacles. He has worn them ever since he was directed to "and I can still see as well as any Highland ghillie or gamekeeper."

A POSSIBLE 5.89-YEAR CYCLE IN SUNSPOT NUMBERS

by Edward R. Dewey

A cycle about 5.91 years long has been und in a variety of terrestrial phenomena. has been found in the liabilities of busi-ss failures, 1857-1953, rail stock prices, 31-1956, combined stock prices, 1871-1956, dustrial stock prices, 1871-1950, cotton ices, 1731-32—1949-50, pig iron prices, 34-1953, and copper prices, 1784-1953. The use of this cycle is unknown, but it is too ng-continued and too regular to be easily result of chance; too diverse to be easily used by forces within the systems involved.

It has been conjectured that the ultimate use of earthly cycles such as this one may extra-terrestrial—either associated with liocentric planetary movements or arrange-nts or with ultra-long energy waves or cosmic ves from outer space. In either event, if ere are forces timed in this way they might so affect the sun. If so, such an influence ght be reflected in sunspot numbers. It erefore seems worth while to see if a 5.91-ar cycle in sunspot numbers exists. The esent investigation was directed towards is end.

Relative sunspot numbers, 1749-1960, plus e Sunspot Number Constant of 22 are studied see whether or not a 5.91-year cycle is esent. This length of 5.91 years is chosen r study because of the importance of cycles out this length in terrestrial affairs.

The Sunspot Number Constant is added be-use short cycles in sunspot numbers cannot studied adequately otherwise.

The results of the study are negative. It d not prove possible to isolate a cycle of is length in annual sunspot numbers, 1749-60. This fact is an argument against the theories of ultra-long energy waves and/or heliocentric planetary movements or arrangements, although of course not a final one.

If the terrestrial cycles of this general order of magnitude are indeed *exactly* 5.91 years long, there seems to be no corresponding solar cycle.

This enquiry is not the last word. It used only annual data 1749-1960. Monthly data would have been better. It did not use annual data 1700-1748 which were not conveniently available when the study was made. With more work it might be possible to effect a better elimination of what seem to be rhythmic cycles of nearby length. No attempt was made to see if a 5.91-year cycle is present in sunspot numbers, alternate cycles reversed.

The enquiry did turn up a definite hint of a cycle just a shade shorter than 5.91 years, viz., 5.89 years long. If, upon re-examination, the terrestrial 5.91-year cycles should prove to be a shade shorter also, further investigation of this 5.89-year cycle in sunspot numbers should be prosecuted and the cycle definitized. In the meantime it may be noted that both the so-called 5.91-year cycle on earth and the possible 5.89-year cycle on the sun crest at approximately the same time.

However, without the use of monthly sunspot numbers (in contrast to the annual ones used for this study) and/or the removal of other cycles of nearby lengths, it is impossible to know the length for sure, or to know whether or not this so-called 5.89-year cycle is present as a rhythm, or is merely present on the average in each half of the data.

It will not escape the observing reader that 5.89 years is exactly 1/5th of the sidereal period of Saturn. At the moment there is no evidence that this fact is more than coincidence.

XCERPTS FROM AN ARTICLE REPORTING ON BASIC SEARCH FROM THE JANUARY 1961 *Journal of cle Research*.

ABBOT'S WEATHER FORECASTS

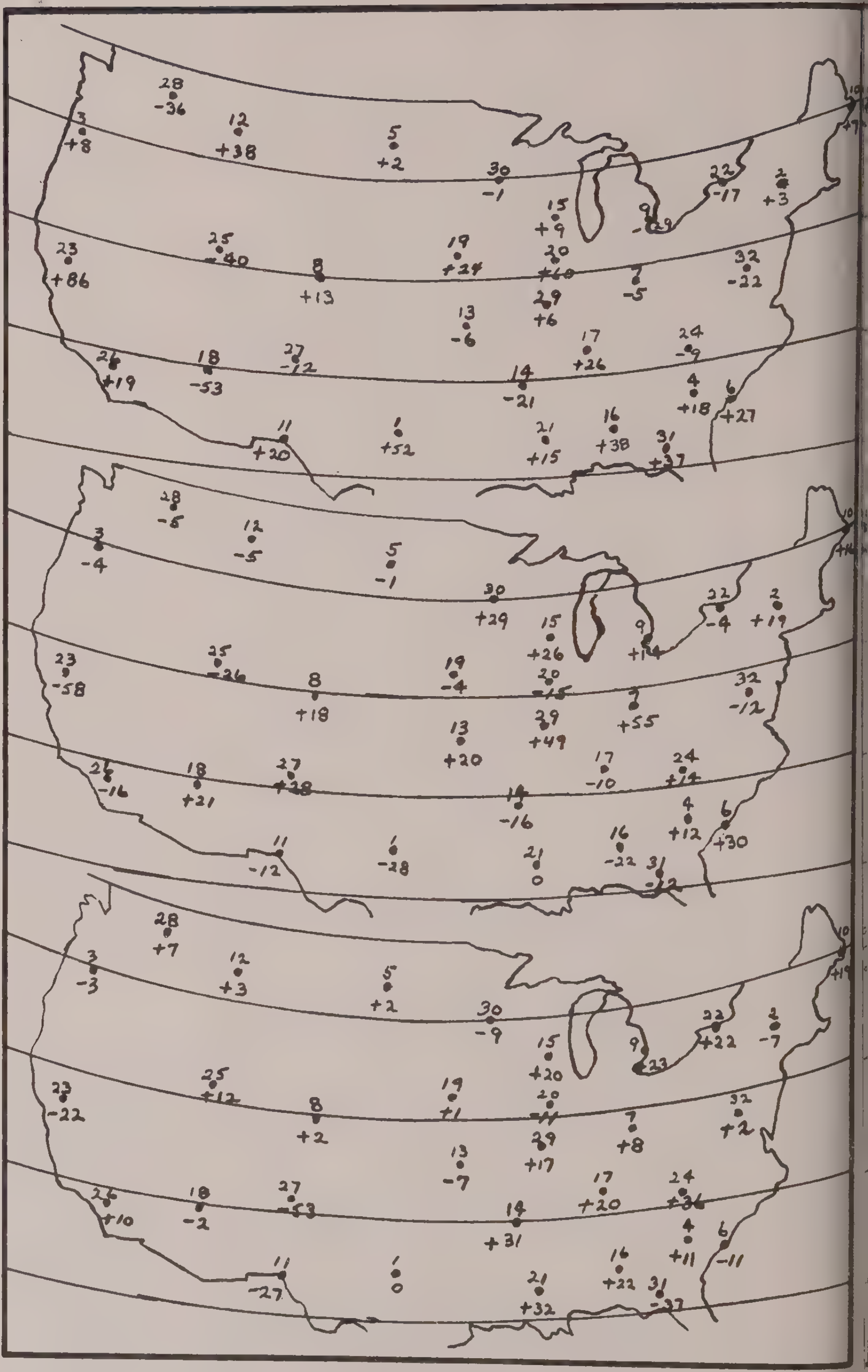
for 1961

How to Read the Map

Each station is marked by a small circle. *Above* the circle is a number which identifies the city. The list of numbers and corresponding cities follows.

1. Abilene, Tex.
2. Albany, N. Y.
3. Albany, Oreg.
4. Augusta, Ga.
5. Bismarck, N. Dak.
6. Charleston, S. C.
7. Cincinnati, Ohio
8. Denver, Colo.
9. Detroit, Mich.
10. Eastport, Me.
11. El Paso, Tex.
12. Helena, Mont.
13. Independence, Kans.
14. Little Rock, Ark.
15. Madison, Wis.
16. Montgomery, Ala.
17. Nashville, Tenn.
18. Natural Bridge, Ariz.
19. Omaha, Nebr.
20. Peoria, Ill.
21. Port Gibson, Miss.
22. Rochester, N. Y.
23. Sacramento, Calif.
24. Salisbury, N. C.
25. Salt Lake City, Utah
26. San Bernardino, Calif.
27. Santa Fe, N. Mex.
28. Spokane, Wash.
29. St. Louis, Mo.
30. St. Paul, Minn.
31. Thomasville, Ga.
32. Washington, D. C.

Below the circle is a number which is the forecast. It tells the percentage deviation of precipitation from the normal for that station.



1961

In the report, "A Long-Range Forecast of nited States Precipitation," C. G. Abbot ade a forecast of wet and dry weather for the ears 1950 through 1967 by months.

(This report is in *Smithsonian Miscellane-us Collections,* Volume 139, Number 9, and is vailable for $1.25.)

The forecast for 1961 from Dr. Abbot's re-ort is given on the map at the left and in he table below. In the forecast the figures re percentage deviations from normal.

Augusta, Georgia, for example, is forecast s having 18% more precipitation than normal uring the first four months of 1961, 12% more precipitation than normal during the middle four months of 1961, and 11% more precipitation than normal during the last four months of 1961. A very wet year for Augusta, Georgia!

On the map the cities are marked by dots, and the code number to identify the city is shown above the dot. The percentage departure fron normal precipitation is shown below the dot.

These forecasts are experimental in nature, but Dr. Abbot looks for 60% accuracy. The expectation of being right 6 times out of 10 is based on the 1950—1958 period for which actual observations have been compared to the forecast values.

Predicted Percentage Departures from Normal Precipitation—1961

	1 Abilene Tex.	2 Albany N. Y.	3 Albany Oreg.	4 Augusta Ga.	5 Bismarck N. Dak.	6 Charleston S. C.
A. First Four Months	+52	+3	+8	+18	+2	+27
B. Middle Four Months	-28	+19	-4	+12	-1	+30
C. Last Four Months	0	-7	-3	+11	+2	-11

	7 Cincinnati Ohio	8 Denver Colo.	9 Detroit Mich.	10 Eastport Maine	11 El Paso Tex.	12 Helena Mont.	13 Independence Kans.
A.	-5	+13	-29	+7	+20	+38	-6
B.	+55	+18	+14	+16	-12	-5	+20
C.	+8	+2	+23	+19	-27	+3	-7

	14 Little Rock Ark.	15 Madison Wis.	16 Montgomery Ala.	17 Nashville Tenn.	18 Natural Bridge Ariz.	19 Omaha Nebr.	20 Peoria Ill.
A.	-21	+9	+38	+26	-53	+24	+60
B.	-16	+26	-22	-10	+21	-4	-15
C.	+31	+20	+22	+20	-2	+1	-11

	21 Port Gibson Miss.	22 Rochester N. Y.	23 Sacramento Calif.	24 Salisbury N. C.	25 Salt Lake Utah	26 San Bernardino Calif.
A.	+15	-17	+86	-9	-40	+19
B.	0	-4	-58	+14	-26	-16
C.	+32	+22	-22	+36	+12	+10

	27 Santa Fe N. Mex.	28 Spokane Wash.	29 St. Louis Mo.	30 St. Paul Minn.	31 Thomasville Ga.	32 Washington D. C.
A.	-12	-36	+ 6	-1	+37	-22
B.	+28	-5	+49	+29	-12	-11
C.	+53	+7	+17	-9	-37	+ 2

A POSSIBLE 32-WEEK CYCLE IN WESTINGHOUSE ELECTRIC STOCK PRICES

by Gertrude Shirk

There is a 32-week cycle in the price of Westinghouse Electric common stock which has persisted with a fair degree of regularity since 1951, as far back as our records go.

A picture of this 32-week pattern weaving around a trend *which is level at 100%* (and with the shorter variations smoothed out) is shown below as the solid line on Figure 1. As you can see, with trend removed, the pattern is plain, has some degree of regularity, and persists over the entire period.

A rigid 32-week pattern has been added to the chart by means of the broken line. This regular zigzag line is the result obtained when the solid line is split into equal segments 32 weeks long, and all the segments are averaged. It represents only the "typical" 32-week pattern, but it does give a center around which the solid line varies, and (if this cycle is real and continues to operate) and around which the solid line may continue to operate.

The timing of the highs and lows of the average zigzag thus gives us center points for alternating periods of possible strength and weakness in the price of Westinghouse Electric. Strength and weakness in so far as it is caused by this cycle, that is. Of course, there are many other factors besides this cycle which also influence the price of this stock.

The date of the most recent "typical" low of this cycle was the week ending November 11, 1960. The next "typical" high comes at the week ending March 3, 1961. This high on the rigid zigzag is followed by a low during the week ending June 23, and a high during the week ending October 13, 1961. These dates are

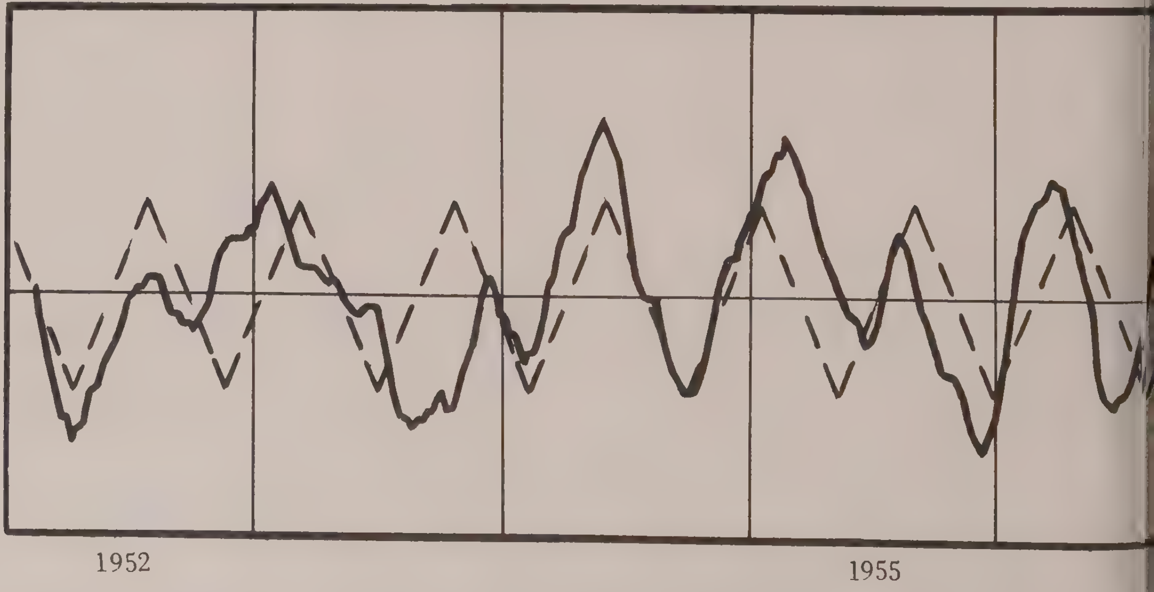


FIG. 1: THE 32-WEEK CYCLE IN THE PRICE OF WESTINGHOUSE

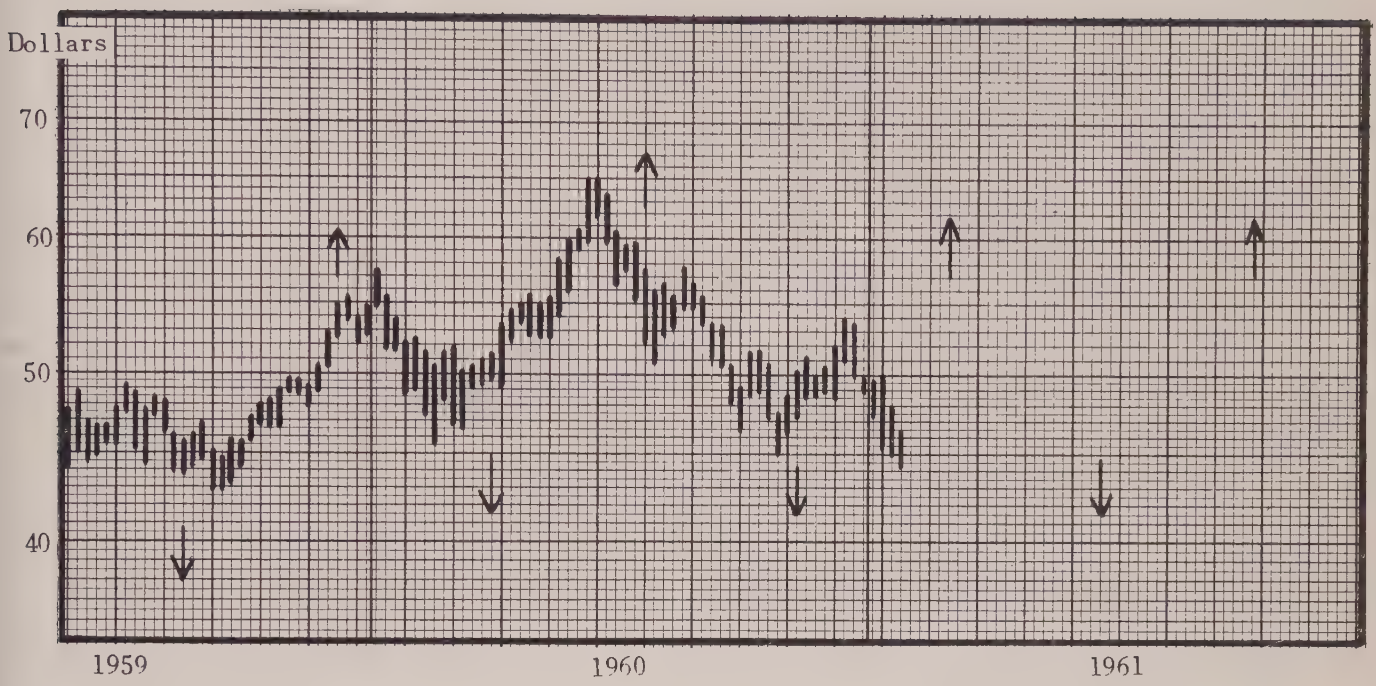
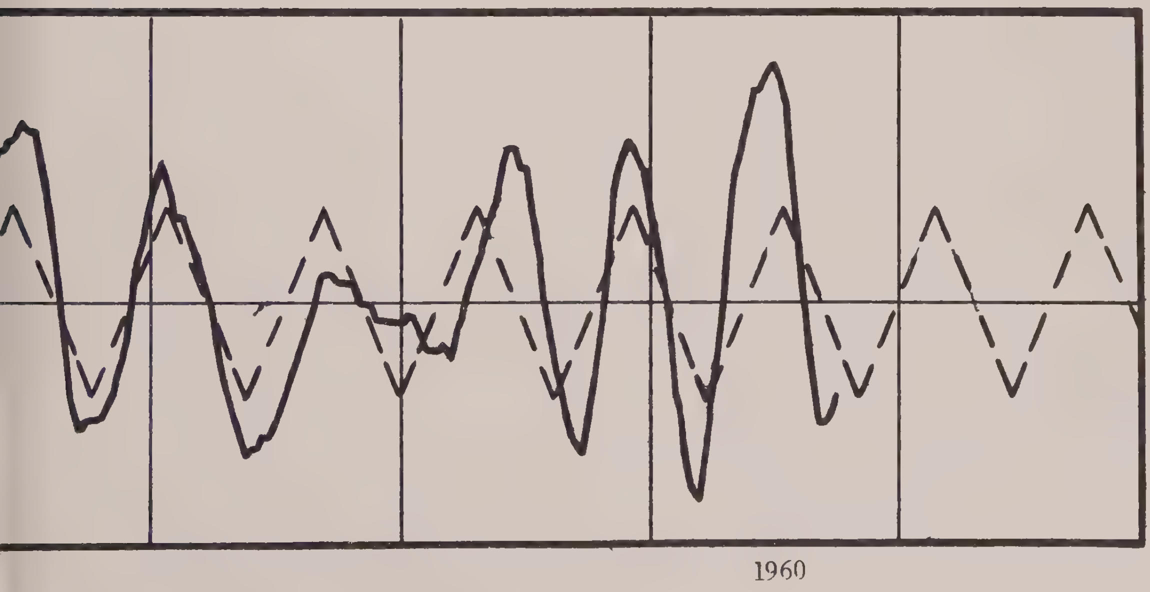


FIG. 2: WESTINGHOUSE ELECTRIC STOCK PRICES
WEEKLY HIGHS AND LOWS



CORPORATION COMMON STOCK

not forecast dates of turning points in the price of Westinghouse. They are the dates of the highs and lows of a rigid 32-week cycle.

Nevertheless, to evaluate the practical worth of this pattern, we are going to apply it to the actual price record.

Figure 2 on page 69 gives the recent weekly high-low picture, and the arrows on the chart show the typical turning points of the cycle. If the typical timing of the cycle is applied to the price record since 1951, the result shown below in Table 1 is obtained.

Table 1 is a record of blind action based only on the 32-week cycle. It assumes that there is nothing else in the world which affects the price of this stock besides this cycle—an assumption that is pure nonsense, of course.

For instance, the action recorded on Table 1 completely ignores the underlying trend. Figure 4 on pages 72 and 73 gives the price record of the stock, and it is immediately obvious that the slope of the trend is at least equally important as the cycle—if not more so.

Any use of this cycle should be modified by your opinion of what the trend is going to

Table 1: Westinghouse Electric Common Stock

Profit or Loss from Trading on a 32-Week Cycle
Based on the 32-Week Cycle Only

	Date of Turning Point	Average	Profit or Loss		Cumulated
	Week Ending Friday	Weekly Price	Short Transaction	Long Transaction	Profit or Loss
High	December 21, 1951	$19.72			
Low	April 11, 1952	18.06	$1.66		
High	August 1, 1952	20.41		$2.35	$ 4.01
Low	November 21, 1952	22.63	-2.22		1.79
High	March 13, 1953	24.25		1.62	3.41
Low	July 3, 1953	22.09	2.16		5.57
High	October 23, 1953	23.50		1.41	6.98
Low	February 12, 1954	28.25	-4.75		2.23
High	June 4, 1954	34.25		6.00	8.23
Low	September 24, 1954	36.03	-1.78		6.45
High	January 1, 1955	39.59		3.56	10.01
Low	May 6, 1955	36.25	3.34		13.35
High	August 26, 1955	32.78		-3.47	9.88
Low	December 16, 1955	28.97	3.81		13.69
High	April 6, 1956	29.75		0.78	14.47
Low	July 27, 1956	27.84	1.91		16.38
High	November 16, 1956	26.94		-0.90	15.48
Low	March 8, 1957	27.44	-0.50		14.98
High	June 28, 1957	32.19		4.75	19.73
Low	October 18, 1957	28.84	3.35		23.08
High	February 7, 1958	32.28		3.44	26.52
Low	May 30, 1958	29.00	3.28		29.80
High	September 19, 1958	31.84		2.84	32.64
Low	January 9, 1959	36.19	-4.35		28.29
High	May 1, 1959	43.31		7.12	35.41
Low	August 21, 1959	44.69	-1.38		34.03
High	December 11, 1959	53.75		9.06	43.09
Low	April 1, 1960	50.50	3.25		46.34
High	July 22, 1960	54.81		4.31	50.65
Low	November 11, 1960	48.75	6.06		56.71
		Total Profit	$13.84	$42.87	$56.71

Note: Profit and Loss figures are before costs, taxes, dividends on short side, and assume short sales were possible; figures do not include dividends received on long side.

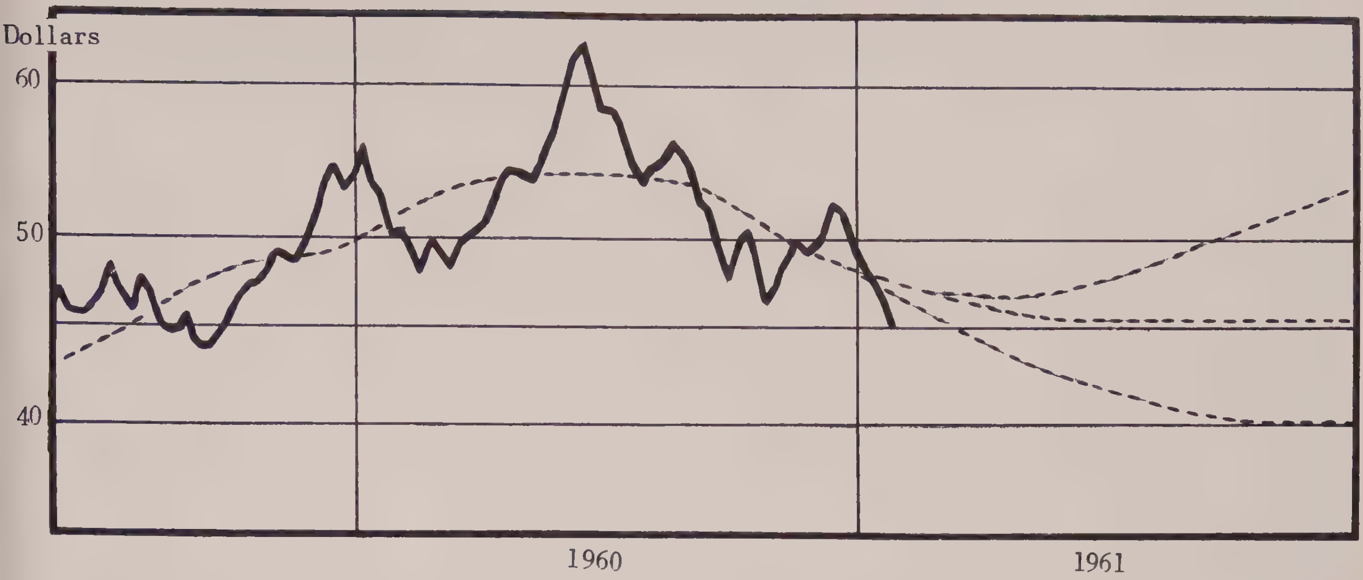


FIG. 3: THE PRICE OF WESTINGHOUSE ELECTRIC STOCK AND THREE POSSIBLE 1961 TRENDS

Table 2

Westinghouse Electric Common Stock Prices

Possible 1961 Levels Based on Assumed Trends and the 32 -Week Cycle

		Cycle Strength	Trend I Down	Trend I x Cycle	Trend II Level	Trend II x Cycle	Trend III Up	Trend II x Cycle
Low	Nov 11, 1960	96.6%	$50.00	$48.30	$50.00	$48.30	$50.00	$48.30
High	Mar 3, 1961	103.5	45.40	46.98	46.80	48.40	46.80	48.40
Low	Jun 23, 1961	96.6	42.20	40.76	45.70	44.15	47.30	45.69
High	Oct 13, 1961	103.5	40.30	41.71	45.70	47.30	50.70	52.47

do. I could have devised the trend for the long record shown in Figure 4 and modified the action shown in Table 1 according to the cycle combined with the trend. The profit picture would have been greatly increased. This approach would not give a fair evaluation of the cycle, however. Furthermore, the nature of trend is such that you never know exactly what it has been until after it has passed—and even then half the people will not agree with you.

The cycle alone (assuming trend level at 100%) has a strength of 103.5% of trend at the peak, and 96.6% of trend at the low, on the average. That is, the cycle moves up about 7% (from the low to the high) in about 16 weeks (half the length, or one leg of the cycle). Obviously, if the trend is moving at a faster rate in the opposite direction, it will overwhelm the cycle.

Conclusions about what trend will do in any given instance will depend on a lot of factors—what the market will do, the relative strength of the issue, the possible effect of any correction to overpricing or underpricing, etc., etc.

I am not just putting you on about trend difficulties, either. Look at Figure 3. It repeats the last part of Figure 4, but with three possible trends into 1961 added. One trend slope levels, and turns up, a second levels, and stays there, a third trend goes on down.

Table 2 takes each of these three trends, adds the 32-week cycle, and gives the result. You can take your pick.

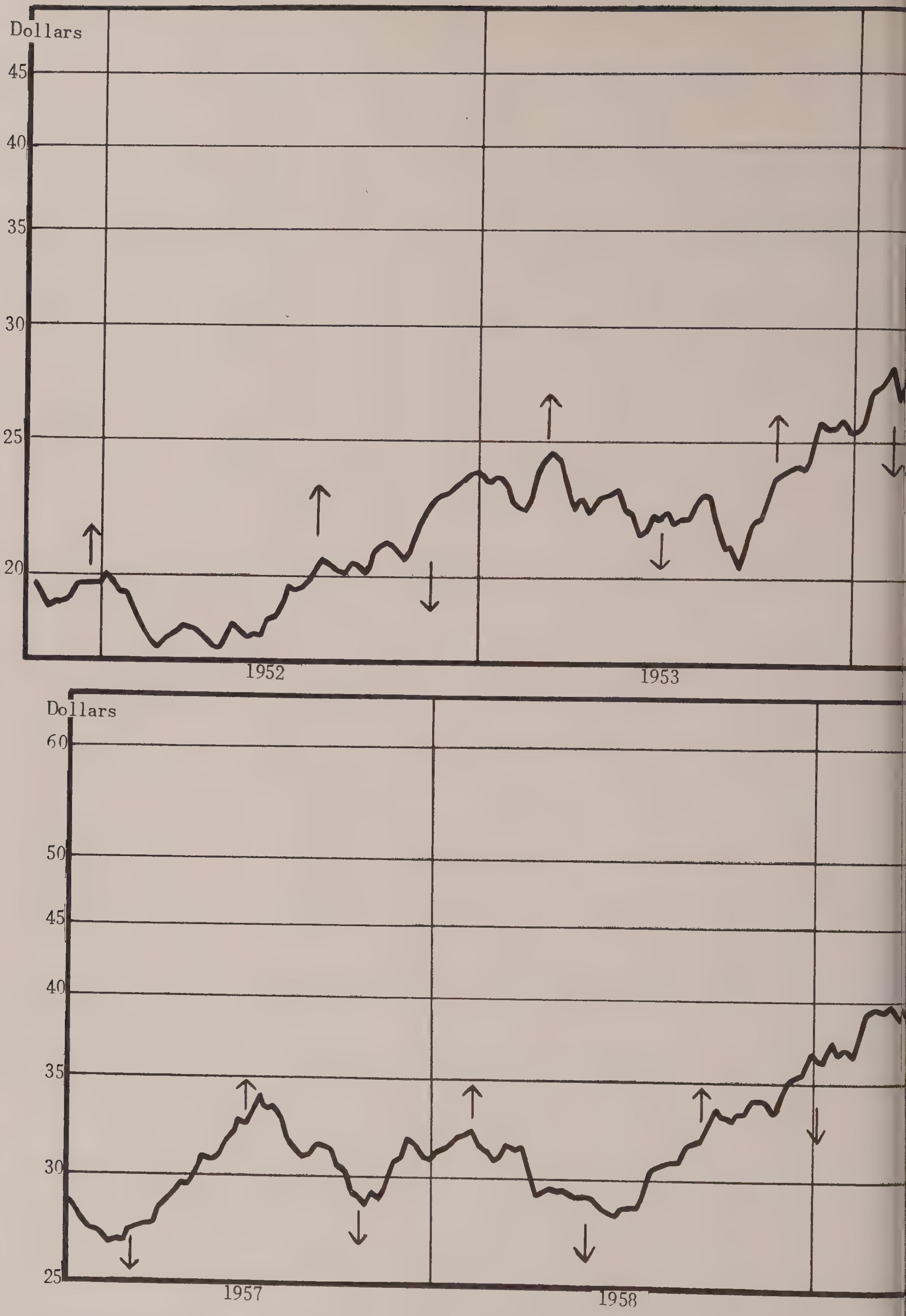
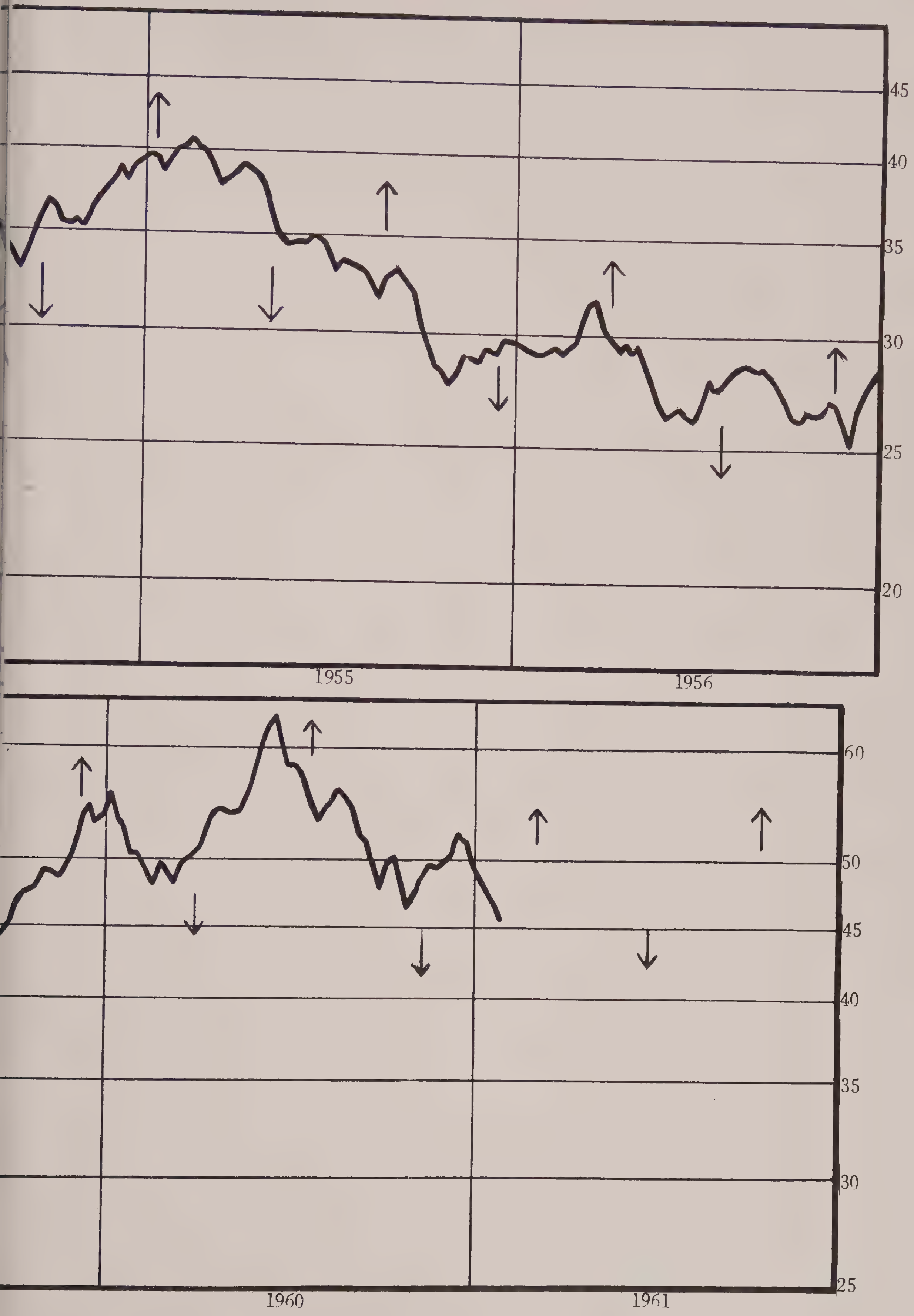


FIG. 4: THE RECORD OF THE PRICE OF WESTINGHOUSE ELECTRIC STOCK.



ARK THE TIME OF IDEAL HIGHS AND LOWS OF A POSSIBLE 32-WEEK CYCLE

Time and time again. . .

BY GUSTAV GUMPERT

Electricity in Humans

One of the most urgent questions facing those interested in cycles is this: How can living creatures, and especially human beings, be subject to cycles? Isn't it true that we have free will, and won't free will prevent us from being affected by forces that would push us into rigid patterns of repetition?

This question really raises, in very modern guise, the old theological problem of Free Will. Do we really make our own decisions? How much are we subject to external forces? In general, it is easier to state the question than the answer. Theologians have been breaking their heads over this very issue in the Western world for nearly the past 2,000 years.

Now Leonard J. Ravitz, M. D., Consulting Director at Eastern State Hospital, Williamsburgh, Va., offers a possible answer in a highly technical article published recently in *The American Journal of Clinical Hypnosis.* Under the title "Application of the Electrodynamic Field Theory in Biology, Psychiatry, Medicine, and Hypnosis," Dr. Ravitz suggests that all biological systems are really special forms of electrical fields; and, as such, are subject to definite natural laws.

Dr. Ravitz draws his conclusions in part from some 30,000 measurements made on about 430 subjects at Yale, Duke, and the University of Pennsylvania schools of medicine, as well as at the Roanoke and Downey Veterans Administration hospitals. About 20per cent of these subjects were measured at least once daily for varying spans of time.

What did all these tests show? That human beings are charged with electricity and are subject to many different and periodic electric "tides" that sweep through them daily. These electric tides occur in cycles, as follows: 24-hour, bi-monthly, quarterly and semi-annually.

Dr. Ravitz says that the highest point on the "plus" side occurs in winter; the lowest point on the "minus" side is reached in the late spring or early summer. He points out that these cycles are partly caused by forces at work within the human being and partly by forces outside him. The forces outside? Let his own words answer: "On inspection, geomagnetic tides likewise seem to correspond to these electric rhythms. Moreover annual variations in the force field patterns of trees have paralleled the sunspot cycle, and evidence has been collected which suggests similar trends in human subjects."

More Weather

At the risk of being trite, I am going to talk about the cold weather we have been having. The severe cold that the northeastern part of the country has experienced this winter should not come as any surprise to the people who have followed Doctor Raymond Wheeler's work. Dr. Wheeler, you will recall, has done considerable work on weather cycles.

While going over some old files I came across a 1943 article on cycles written by Vance Packard for the old *American Magazine* when he was on the staff there. The article discussed Dr. Wheeler's cycle work.

Doctor Wheeler is reported to have said that all the cycles including a great 510-year one are headed for a severe cold trough around 1980. He believed that by 1960, if not before. . .we should be through the warm phase, and coldness should be setting in.

Market Cycles

Our analysis of market cycles for February: 1-8, uncertain; 12-28, generally downward.

Biorhythm Again

We don't want to seem to be plugging Biorhythm, a method of analyzing daily life cycles now promoted by Biorhythm Computers, Inc., New York City; but we must be honest.

The president of this company gave us a complimentary "reading" of our cycles, based on his computations, for a four-month period. These charts show what are called "critical" days—when you're more likely to have an accident than at other times.

We got our chart on December 23; a critical day was shown for December 20 (before the chart arrived); and on December 20 precisely we had an accident while pushing an automobile out of a snowdrift. Coincidence?

LETTERS:

Negative Ions

Dear Sirs:

I have just finished reading with considerable interest your article in the December issue of *Cycles* regarding negative ions and psychological effects. I would very much appreciate additional information on the above with reference to what benefits may possibly be derived from the installation of suitable equipment. . .

Milwaukee, Wisconsin Marvin Raffel

Comment: I think the best way to answer your question about the use of negative ions is to refer you to the article "Can Negative Ions Added to the Air you Breath Improve your Well-Being?" which is in the February 1961 issue of *House Beautiful*. G. S.

Number of Cattle

Dear Mr. Dewey:

The cycle analysis involving the total number of cattle proved to be very informative. If, at any time, a further analysis proves attractive, I have a suggestion.

Instead of total cattle numbers, you might try using only total cow numbers. This represents the breeding stock of the total cattle plant. The advantage of using this classification over total cattle numbers is that the cycle basically represents changes in cow numbers. Other cattle numbers change primarily because of cow number changes.

This is not entirely true, of course. Other trends also affect cattle numbers, such as the higher calving rate, marketing at a younger age, etc.

I would personally like to see the analysis conducted on cow numbers. It should prove informative.

Urbana, Illinois Robert Holbert

Cycles

Chentlemens:

For 50 yohrs I ben shtuding der zykels. Ve know der foist vor shtarted in der 3rd zykel, und der Vall St crash came der foist yohr of der 5th zykel, und der 2nd vor in der begining der 7th zykel and now we are in der 5th yohr of der 9th which will be by der end of 63 the clumox of historys greatest clumox (period)

Vot interest me is how you came by der vact of ice cream and der 12 month zykel did you figure it all out yourself or did some von help you? Ve used to choke about der elevator man he had de shortest zykel.

Of course you haf an ox to grind, Stock, Stock, and more stock. You know as vell as I dat librarys are full mit books on zykels. You mean to say your intention is to keep de sheep away from de shear. Och, did you not hear about dis boy who says, "The moving finger writs, and as it writs moves on nor all your peity und wit etc etc. Dis voild goes by de blue print, no living man or beast can change it, nor all your terrs vash away—yours for better zykels.

Comment: Honestly, we figured out the ice cream bit all by ourselves! G. S.

The Report

Dear Mr. Dewey:

At about what date, on or about, is *Cycles* mailed to the members? Like the report for the month of January—when was it mailed?

Cicero, Indiana John F. Sholty

*Comment:*The December and the January reports where both very late reaching the members. We sent them to the printers on time, and the delay occurred after they had left our hands.

Each issue is scheduled to be mailed on the third Saturday of the month preceding. The January issue was supposed to have been mailed on December 17. I did not get my mailing list copy until January 12, and knew therefore that something was wrong.

We believe that we have the difficulty straightened out, and the reports should now arrive on time at about the first of the month.
G. S.

Inside the Market

Dear Sirs:
Your comments in the December issue (page 274) about a new method of analysing the stock market are very interesting. I would appreciate knowing more about it.

Van Nuys, California Antony J. Greco

* * *

Gentlemen:
When are you going to tell us more about "Inside the Stock Market" from page 274 of the December issue?

A P O, San Francisco Col. J.C. Coleman, Jr.

* * *

Dear Sirs:
Even though you do not disclose the details making up the cycles used in "Inside the Stock Market," on page 274 of the December issue, I do believe you could include a short synopsis giving the general trends.

Chicago, Illinois C. T. Knudsen

Comment: Actually, I am in the process of testing this method. You will note that the data given are always for the month preceding publication, so that none of our readers will be tempted to use the information for investment purposes.

I hope in a future column to evaluate the method by comparing the signals against the actual movement of the market. I do not think the results will be particularly startling.
Gustav Gumpert

17-Week Cycle

Dear Sirs:
Have you found, or have you tried to find a cycle equivalent to the 17 plus cycle in the Dow-Jones Industrials in either Standard & Poor's Industrials, or their 500 stock Index?

If you have, I would like to know when it crests.

Chatsworth, California C. C. Carter

Comment: We worked first with Standard & Poor's Industrial Average, and arrived at a cycle length of 17.12 weeks. We switched to the Dow-Jones figures because the record goes back to 1897. With the longer record we refined the length to 17.16.

Presumably it is the same cycle, but in the shorter series the length is a little different. Also, the timing is different. In the Standard & Poor's Industrial Index, a high in the cycle came at the week ending November 11, 1960, on the average. This is two weeks before the high on the cycle as found in the Dow-Jones figures. G. S.

Cocoa Prices

Dear Mr. Dewey:
You have over the last year or two shown a certain cycle in cocoa prices. From recent performance it would appear that the cycle is not behaving. . .in fact, it appears to be moving opposite to your suggested cycle line.

As I am holding no position in cocoa one way or the other, I am not affected, nor am I vitally concerned, but I would like a word of comment from you.

New York City Rolf A. Merton

Comment: The cocoa price cycle we reported was based on an average monthly price. Daily highs and lows may vary considerably over the course of a month, particularly in an active market.

The cycle has averaged 41.7 months in length since 1923. There was a high due, on the average at April 1958. The next low was due, on the average, at January 1960. A drop did occur from 1958 to January 1960 (43 to 30 cents).

The next high is due, ideally, at October 1961, and we cannot judge the current cycle performance until we are well past next October. If the price at next October is above the 30 cent average of January 1960 we can then say that the cycle continued to operate. G.S.

HE GEISINGER INDICATOR

anger signs continued:

Industrial Production as measured by the ederal Reserve Board Seasonally Adjusted ndex continued to drop in December. The ecember Index was 156, a drop of 7% from the eak of last May.

Although this 7% decline is serious, prouction was still 56% above the base period of he Index. (1947-49 equals 100 on this Index). lso, the last decline (1957-58) went 15%. So ar things are only half as bad as they were hen.

It is more serious, I think, that our Indiators do not, as yet signal an improvement.

The Geisinger Indicator went down to -3.00 in September (May 1961 when advanced).

The First Difference Indicator also went down. The November value was -2.00.

The Modified Geisinger Indicator, which combines the Geisinger Indicator and the First Difference Indicator, went down to -4.50 in September (May 1961 when advanced).

Until the Geisinger Indicator turns, watch your step!

January 25, 1961 E. R. Dewey

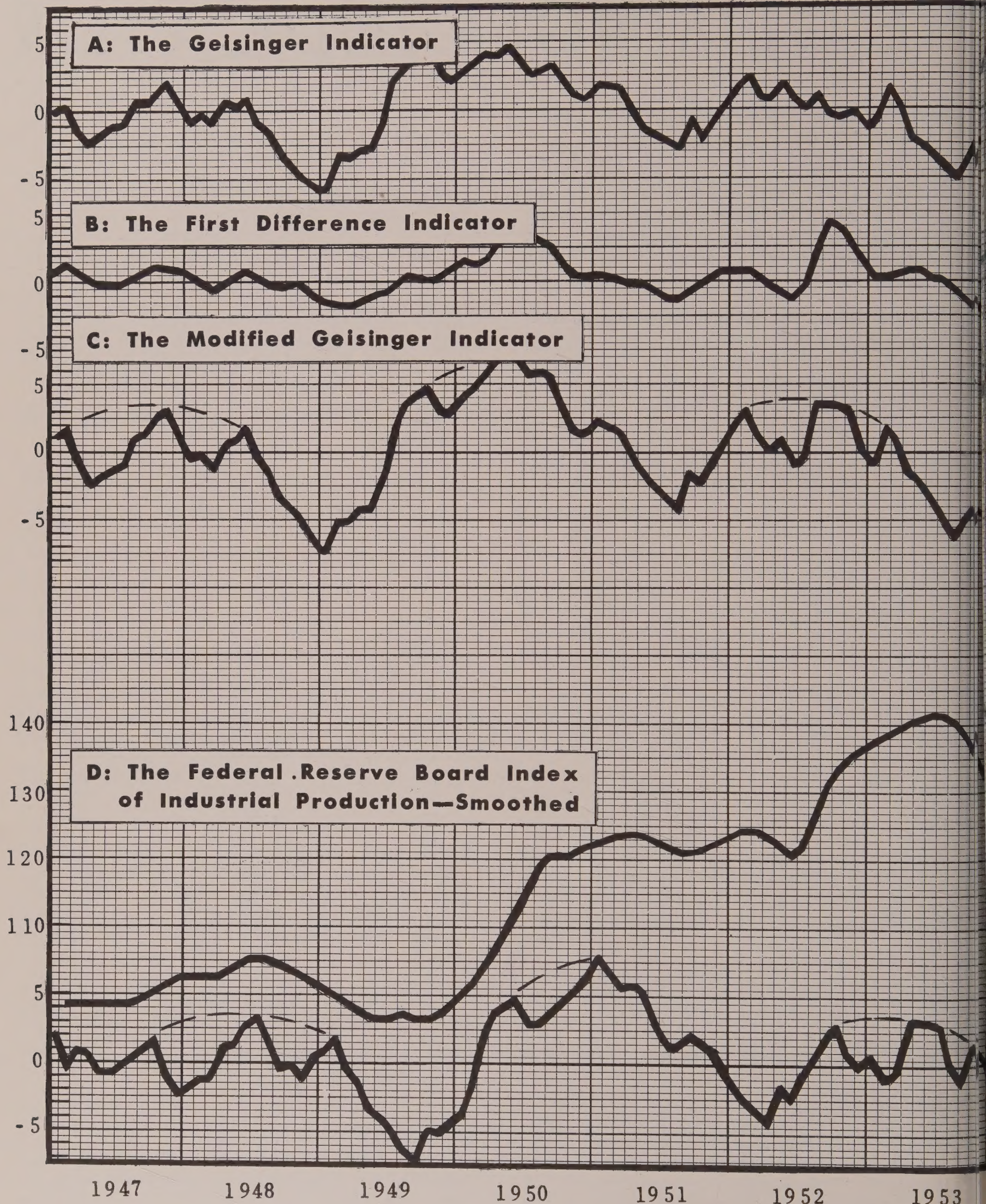
he recent figures:

Month	F.R.B. Index	Geisinger Indicator	First Difference Indicator	Modified Geisinger Indicator	Timing Advanced 8 Months
Jan-1960	168	-2.80 D.S.	4.16	1.36	1960-Sep
Feb	166	-1.60	2.00	0.40	Oct
Mar	166	-2.20 D.S.	-0.33	-2.53	Nov
Apr	165	-2.00	-0.33	-2.53	Dec
May	167	-0.20	0.16	-0.04	1961-Jan
Jun	166	0.20	0.17	0.37	Feb
Jul	166	0.00	-0.17	-0.17	Mar
Aug	165	-2.20 D.S.	-1.00	-3.20	Apr
Sep	162	-3.00	-1.50r	-4.50	May
Oct	161r	*	-1.83r	*	Jun
Nov	159	*	-2.00p	*	Jul
Dec	156	*	*	*	Aug

r - revised; p - preliminary; D.S. - danger signal; * - not yet available

he chart: See the next two pages

The Geisinger Indicator Compared To Indus



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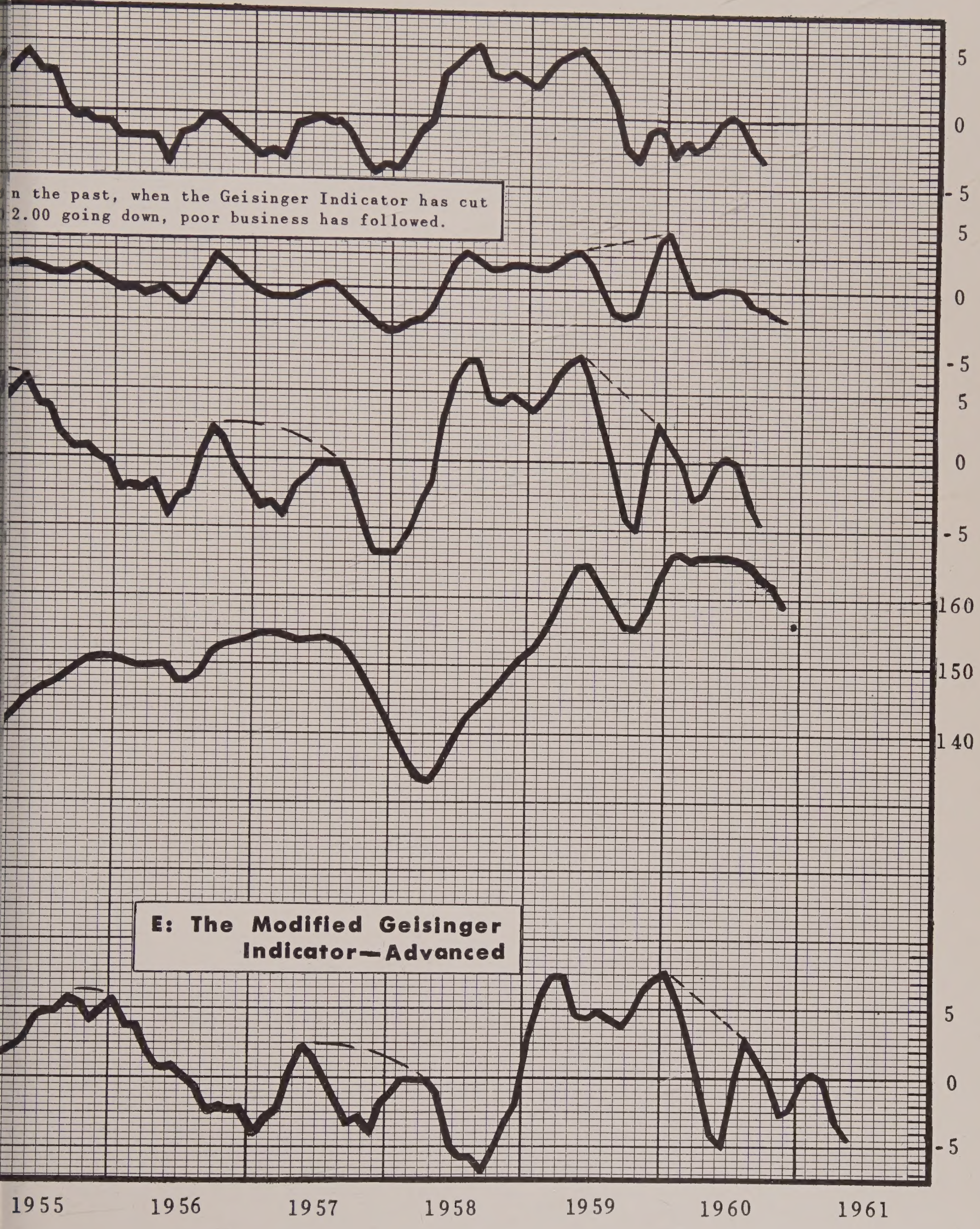

n the past, when the Geisinger Indicator has cut 2.00 going down, poor business has followed.

E: The Modified Geisinger Indicator—Advanced

H A MUSHAM
741 N RUSH ST
CHICAGO,ILL